

INTELLOFAX 5

CENTRAL INTELLIGENCE AGENCY

50X1-HUM

INFORMATION REPORT

This Document contains information affecting the National Defense of the United States, within the meaning of Title 18, Sections 793 and 794, of the U.S. Code, as amended. Its transmission or revelation of its contents to or receipt by an unauthorized person is prohibited by law. The reproduction of this form is prohibited.

CONFIDENTIAL

50X1

COUNTRY	East Germany	REPORT	
SUBJECT	1. Bergtechnikum of the Wismut AG, Freiberg. 2. Names and Locations of Wismut Ore Mines and Description of Mining Equipment	DATE DISTR.	4 March 1954
DATE OF INFO.		NO. OF PAGES	15
PLACE ACQUIRED		REFERENCE	
		REQUIREMENT	

50X1

50X1-HUM

THE SOURCE EVALUATIONS IN THIS REPORT ARE DEFINITIVE.  
THE APPRAISAL OF CONTENT IS TENTATIVE.  
(FOR KEY SEE REVERSE)

50X1-HUM

CONFIDENTIAL												50X1-HUM			
STATE	#x	ARMY	#x	NAVY	#x	AIR	Ev	#x	FBI		AEC	x			

(Note: Washington Distribution Indicated By "X"; Field Distribution By "#".)

C O N F I D E N T I A L

50X1

REPORT

50X1-HUM

COUNTRY : East Germany

DATE DISTR. 19 JAN. 54

SUBJECT : 1. Bergtechnikum of the Wismut AG, Freiberg

NO. OF PAGES 14

2. Names and Locations of Wismut Ore Mines and  
Description of Mining Equipment

PLACE  
ACQUIRED :

NO. OF ENCLS.  
(LISTED BELOW)

50X1-HUM

DATE  
ACQUIRED

SUPPLEMENT TO  
REPORT NO.

DATE OF INFORMATION :

THIS IS UNEVALUATED INFORMATION

50X1-HUM

INTRODUCTION

50X1-HUM

1.

THE BERGTECHNIKUM IN FREIBERG

2. The Bergtechnikum was directly operated and financed by the Wismut AG. It was founded in 1949 by Wismut AG and was dissolved on 15 January 1952. It was housed at the former Hauser Kaserne on Sebastian Bach Strasse in Freiberg and was also sometimes known as "Objekt 105." All instructors

C O N F I D E N T I A L

50X1

C O N F I D E N T I A L  
- 2 -

were paid employees of Wismut. I believe that the Bergtechnikum was founded by Wismut for the purpose of training a sufficient number of miners for supervisory positions. Once this goal was achieved, Wismut dissolved the Bergtechnikum and reverted to occasional evening courses held in the individual mines. (The Bergtechnikum of the Wismut AG was in no way connected or associated with the Bergakademie located at Akademie Strasse in Freiberg. The latter was under the jurisdiction of the East German Ministry for Mining and Smelting. Very occasionally the two schools exchanged professors for short periods.)

3. The administrative office for matters related to the Bergtechnikum was in Chemnitz/Siegmars-Schoenau at the Wismut headquarters. I was in this office (schooling department) once or twice and saw the Soviet Army officer (Major POPOV) in charge there (1951). He was always in uniform. I heard that he was later replaced by a Soviet female engineer, a mining specialist and allegedly the wife of the chief engineer of Wismut (name unknown). Major POPOV was not a mining specialist, but it was believed he had studied at the Technological High School in Moscow and graduated in machine construction. He was of short, stocky build and was perhaps 40 years old. The only other Soviet I personally met in Chemnitz was Soviet Army Captain ECKSTEIN in the transportation department, who was in my opinion of German-Jewish origin. I heard that a certain General MALZOV was the Soviet boss at Wismut AG. The only Germans I met at Wismut headquarters (also once or twice) late in 1951 were two construction engineers, HOFFMANN and STOLARIK. I met them in connection with a new mine car design. A small administrative office connected with the Bergtechnikum was also in Freiberg, Mozart Platz 3. ("Haus des Technikums"), with Soviet and German personnel.
4. All students attending the Bergtechnikum were miners selected from the various pits operated by Wismut in Saxony. The selection of these miners was made by the Wismut shaft inspectors (every mine was supervised by one German and one Soviet inspector) according to ability and sometimes also according to political reliability (activists). The students continued to draw their salaries during studies from their original employment place or mine. A varying number (45 - 60) of full-year and half-year courses were held at the Bergtechnikum, covering all fields of mining equipment and ore-mining techniques. The average class was attended by 30 to 40 students. Successful graduates of full-year courses usually received a diploma, qualifying them as "supervisors" in their specific field. (For example my graduates became "supervisors for mining machinery"). All types of mine workers participated in such courses: master machinists, bore and blast technicians, drillers, geologists, mine surveyors, etc.
5. I remember the following names and personal data of the members of the teaching staff at the Bergtechnikum in Freiberg. To my knowledge none of these persons is a Communist or Communist sympathizer, regardless of their eventual membership in the SED.

50X1-HUM

C O N F I D E N T I A L

50X1-HUM

**Page Denied**

C O N F I D E N T I A L

- 4 -

50X1

50X1-HUM

ORE MINES OPERATED BY WISMUT AG

6. The names and locations of Wismut ore mines which are known to me are listed below. The various mines are called "Objekte" by the Germans in Wismut and are numbered, all of them, with numbers over 100 (107, 112, 118, etc.); I cannot remember the individual

C O N F I D E N T I A L

C O N F I D E N T I A L

- 5 -

numbers for each "Objekt." I visited "Objekt 112" in Johanngeorgenstadt only once and visited several times (with my students) the schooling shaft (Lehrgrube) "Reiche Zeche" in Freiberg. I have pinpointed the approximate location of the mines on two overlays [see pages 11 - 12 of this report].

a. Mines Located in Western Saxony (West Erzgebirge)

[See page 11 of this report, an overlay of GSGS 4416 (A.M.S. M641), sheet S-7, Zwickau.]

Johanngeorgenstadt, 5 Objekte, approximate labor force (1951)-4,000 miners

(The German shaft inspector at Objekt 112 was MICHAEL,

50X1-HUM

Aue, 2 Objekte, labor force-about 1,500 miners.

Schwarzenberg, 2 Objekte, labor force 3,500 miners.

Breitenbrunn, 2 Objekte, labor force-about 700 miners.

Erlabrunn, 1 Objekt, labor force-about 700 miners.

Eibenstock, 2 Objekte, labor force-about 300 miners.

Annaberg - Buchholz, 2 Objekte, labor force-about 1,000 miners.

b. Mines Located in Eastern Saxony (East Erzgebirge) and Freiberg

[See page 12 of this report, an overlay of GSGS 4416 (A.M.S. M641), sheet R-8, Dresden.]

Baerenhecke, 1 Objekt, labor force-about 200 miners.

Altenberg, 1 Objekt, labor force-about 400 miners.

Baerenstein, 2 Objekte, labor force-about 1,700 miners.

Johnsbach, 1 Objekt, labor force-about 300 miners.

Glashuette, 1 Objekt, labor force-about 200 miners.

Gittersee bei Dresden, 1 Objekt, labor force-about 600 miners. This was the only pit where uranium was gained from pitchblende. A new concentrating plant was built in Gittersee in 1952/1953. I saw this installation only from a great distance, traveling by, but I assume from the size of it that it must be planned to use it also for dressing of ores mined at other Wismut mines.

Schmiedeberg, near Dippoldiswalde, 1 Objekt. Since July 1951 the Wismut office for the administration of the East Saxony mines was also in Dippoldiswalde, together with the Central Mechanical Repair Shop for the pits. Prior to this date both of them had been in Freiberg.

C O N F I D E N T I A L

50X1

C O N F I D E N T I A L

- 6 -

Reiche Zeche (Himmelfahrt) and David Grube were in Freiberg with an approximate labor force of 800 miners. The first was also used by Wismut as a training shaft for the students of the Bergtechnikum. The first to the eleventh floors ("soles") of the Reiche Zeche were exploited and operated by the VEB Albert Funk Bleierz, whereas the "soles" ten to twelve were exploited by Wismut (ten and eleven partly jointly). I remember that the name of the German shaft inspector (manager) of the David Grube was Dipl. Ing. BULLA.

7. Practically all Wismut ore mines were operated in three shifts: 0200 to 1000, 1000 to 1800, and 1800 to 0200 hours. Nowhere was slave or penal labor used in the mines.
8. All ore mined in the various Wismut mines was shipped to the dressing (concentrating) plant (Aufbereitung) in Freital [see paragraph 12 below]. Ore from the mines in Western Saxony was shipped by railroad first to Aue and from there to Freital. A double-track railroad line was built between Johanngeorgenstadt and Schwarzenberg. Ores mined in the Eastern Saxony mines were shipped in dump trucks to Freital, with exception of the pitchblende mined in Gittersee. I have no concrete information about the ore mined in the two Freiberg pits (Reiche Zeche and David Grube), but I suspect their ore was dressed in the new Gittersee dressing plant.
9. From Freital all ore was shipped by railroad to the USSR, via Dresden-Kottbus-Frankfurt a/d Oder. During my work as instructor at the Wismut Bergtechnikum in Freiberg I traveled frequently by rail to Dresden via Freital [redacted] 50X1-HUM  
[redacted] 50X1-HUM In passing through Freital I saw occasionally ordinary closed freight cars loaded at the loading-platform of the dressing plant with wooden boxes approximately 1 x 1 x 1 meters. The trains then always left in the direction of Dresden. Plant and trains were always heavily guarded by Soviet soldiers.
10. I heard rumors in Freiberg that Wismut AG was making new drilling tests (in 1951/52) in Thuringia, near Saalfeld, Gera, Ilmenau and perhaps other places. Personnel from the Saxony mines were allegedly sent to Thuringia.

50X1-HUM

LIST OF MACHINERY SUPPLIERS FOR WISMUT ORE MINES

11. [redacted]

[redacted] Below I have listed the names of the concerns supplying this equipment to the Wismut mines.

C O N F I D E N T I A L

50X1

C O N F I D E N T I A L

- 7 -

<u>Name of Supplier</u>	<u>Location</u>	<u>Equipment Supplied</u>
Transmasch, formerly Bleichert AG,	Leipzig,	cranes, conveyors and hoists.
Lowa, Hennigsdorf near	Berlin,	electrical mine locomotives.
SAG Maschinenfabrik, Hohnstein-Ernsttal	near Chemnitz	hoists and pit-head winches
Abus (Ausrustung fuer Bergbau und Schwermaschinenbau)		winding engines, gears for pumps and compressors.
SAG Kabel, formerly Sachsenwerk	Dresden-Niedersedlitz	engines
Messgeraetefabrik, formerly Schaeffer & Budenberg	Magdeburg	measuring instruments.
Vereinigte Pumpenfabriken Jaeger	Leipzig	pumps
Weis & Monsky	Halle	pumps
Vereinigte Pumpenwerke Leipzig		ventilators, compressors and exhaustors
Zwickauer Maschinenfabrik	" "	" "
Polysius (formerly Dessauer Maschinenfabrik)	Dessau	ventilators, compressors and exhaustors
Meteor	Berlin-Lichtenberg	" " "
Westfalia	Herne, Westfalia	mechanical picks and hammer drills
Wismut Central Mechanical Shops	Freiberg, later in Dippoldiswalde	drill rods and drill heads.
SAG Maschinenfabrik	Hohnstein-Ernsttal	all auxiliary boring equipment
Maxhuette	Unterwellenborn	rails

SITE LAYOUT AND DESCRIPTION OF THE FREITAL ORE DRESSING INSTALLATION

12. Freital is situated on the railroad line going from Freiberg to Dresden in Saxony (approximately eight kilometers from Dresden, 38 kilometers from Freiberg). I was never inside the dressing plant at any time; however, I frequently traveled by train from Freiberg to Dresden on weekends in 1950 and 1951 and viewed the plant from the train. Based on these observations I have made a   sketch /see page 13 of this report/, and I can identify and describe the following points:

50X1-HUM

C O N F I D E N T I A L



50X1

## C O N F I D E N T I A L

- 8 -

- Point 1 Foundations for a planned small section rolling mill (Feinwalzwerk).
- Point 2 Forge and Press, a brick building, 20 meters high.
- Point 3 Coal Bunker.
- Point 4 Generator Plant.
- Point 5 Siemens Martin Furnaces of the steel mill. I have heard that five furnaces were installed here, four with a capacity of 10 tons each, one of 40-ton capacity.
- Point 6 Two Cupola Furnaces, eight tons capacity each.
- Point 7 Two Electric Steel Furnaces of 18 tons' capacity each. (Note: The capacity figures mentioned under Points 5 to 7 I heard in 1952 at EKS, Fuerstenberg, when I worked at the steel plant project for EKS).
- Point 8 Office and Administration Building for the steel mill.
- Point 9 Board Fence, approximately 1.50 meters high.
- Point 10 Railroad to Dresden and Freiberg; double-track line.
- Point 11 Road to Dresden and Freiberg; 10 meters wide, cobblestone surface, with double-track electric streetcar line Dresden-Harrisberg.
- Point 12 Street named "Huetttenstrasse" with railroad underpass.
- Point 13 Wooden Fence, 2.20 — 2.50 meters high with 50 centimeters barbed wire on top; watchtowers (wood) at intervals of 70 to 80 meters, equipped with seachlights at night and manned by Soviet soldiers day and night.
- Point 14 Brick Building, 20 x 10 meters; two stories high, flat roof; this building looked like an office building to me, probably housed the administration for the dressing plant (laboratories ? ).
- Point 15 Dressing Plant, a brick construction about 100 x 80 x 18 meters, with saw-tooth roof (steel construction) and large windows.
- Point 16 Crushing Mill (?), a brick construction, 20 x 10 x 10 meters, flat roof.
- Point 17 Plant Entrance with Small Guardhouse, manned by Soviet soldiers and German civilians.
- Point 18 Railroad Siding, double tracks connecting with the railroad line Freiberg-Dresden (Point 10). Closed freight cars were loaded on the loading-ramp in front of the building, Point 15 with wooden boxes (crates) approximately 1 x 1 x 1 meters in size. The loading operation and the freight trains were guarded by Soviet soldiers.

C O N F I D E N T I A L

50X1

C O N F I D E N T I A L

- 9 -

50X1-HUM

NEW MINE CAR (ABSCHLAGWAGEN) CONSTRUCTED BY WISMUT AG

13.

50X1-HUM

Accidentally I kept an old model drawing in my possession which shows different sectional views and other details of the mine car /see sketch on page 14

50X1-HUM

/ Details and dimensions shown by the model drawing are not in all instances the final constructional version (which is in detail unknown to me).

14. The purpose of this new mine car train ( 6 to 14 single cars were always coupled without interspace and used together in one blasting operation) was the direct catching of the blasted rock in a mine tunnel, its immediate removal by pulling the mine cars out (by locomotive) right after the blast, and thereby making possible immediate advance work (boring), after ventilation of ten minutes. The first mine cars nearly touched the bored front-wall (Brust) of the tunnel. Approximately 90 per cent of the blasted mass fell into the train, leaving only about 10 per cent for manual removal from the gole in the tunnel. Experiments proved that the total time-saving by using this type of mine car amounted to one third of the ordinary operation (blasting and shoveling, use of old carts). To fully utilize the new mine cars, a tunnel profile at least two meters high and two meters wide had to be selected. The number of cars used in one operation varied and depended on the hardness of the rock. Experiments showed that in rock of 10 to 11 degrees of hardness (by using ten boreholes in the front wall, of which usually two misfired) the blast threw rock for eight meters back in the tunnel, whereas by a degree of hardness of 6 or 7 (conglomerates), the rock catapulting distance was only 6 or 7 meters.

15. The construction of the mine cars had to be very strong because the load factor was very great. The side walls were made of 20 mm. steel sheet (with exception of the last car the mine cars had no front or rear walls). The center of gravity was placed very low; the axles, very strong (100 mm. diameter) with attachable wheels (axle end 50 mm. diameter) and friction bearings. A single car had to take a momentary thrust of approximately 10,000 kg. The car body was pivoted and had a locking device; this measure enabled an easy sidewise unloading of the cars, whereas the locking device was necessary during the loading. The single cars were connected to each other by chains attached to hooks mounted on both sidewalls of the cars. The length of such a mine car was 700 mm.; its width, 1120 mm.; its height, 1330 mm. (measured from the top edge of the rail).

16. The first and the last car of such a mine-car train were of different construction, as shown on my sketch. The first car had two collecting plates ("Auffangbleche") mounted on the two vertical leading edges, made of 20 mm. sheet steel, 1500 mm. high and 600 mm. wide. These plates were simply leaned with their outer edge (at

C O N F I D E N T I A L

C O N F I D E N T I A L

- 10 -

50X1

the necessary angle) against the two sidewalls of the tunnel and directed the main flow of the blast into the cars. The first car had also sheet steel plates mounted on the bottom of the car body for the purpose of keeping the tracks free from rock. Both attachments (plates at the front and on the bottom of the car) were removable. The last mine car had a trap door in the back (with locking device). In addition, a removable curtain of metal chains, set in a rectangular iron-frame of 40 x 65 mm. thickness, was vertically installed across the middle of the car (sometimes this chain arrangement was put in the next to the last car or in both). These chains (about 12 in a frame) hung loosely down from the top edge of the frame and served the purpose of reducing the impact of the blasted rock, at the same time protecting the rear wall (trap doors) of the last car. The chain-frame was locked by pins to the car body. To prevent a shifting of the train under the impact of the blast, a double anchoring (top and bottom) at two to three meter intervals on the sidewalls of the tunnel was provided. Metal chains were used for this purpose, not tie beams (as shown in the sketch). The bolts in the sidewalls of the tunnel were afterwards not removed, but used for the installation of the compressed air pipe line. The model drawing shows also the installation of metal shields between the top edge of the cars and the tunnel walls (to prevent the falling of rock between mine cars and tunnel walls), but this idea was eliminated in the final design.

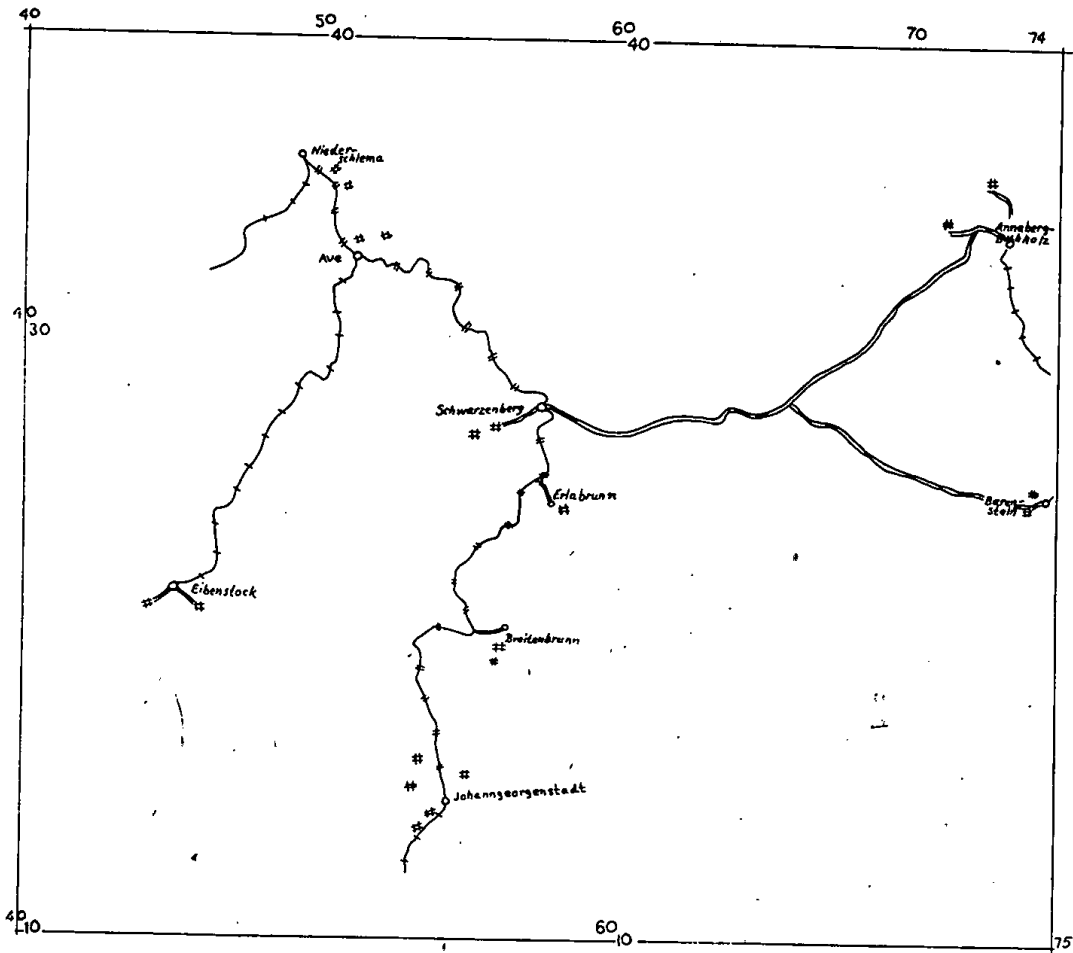
17. I do not know to what extent Wismut produced and utilized the new car design. In fall 1951 I saw these mine cars being used in the Reiche Zeche (Himmelfahrt), the schooling shaft in Freiberg, and in Objekt 112 in Johanngeorgenstadt (the only two Wismut mines I ever visited). I heard that the cars used in the Reiche Zeche were built by the Wismut Central Mechanical Workshops in Freiberg, and that the equipment in Johanngeorgenstadt was made by SAG-Maschinenfabrik in Hohnstein-Ernstthal near Leipzig.

C O N F I D E N T I A L

CONFIDENTIAL  
Page 11



50X1

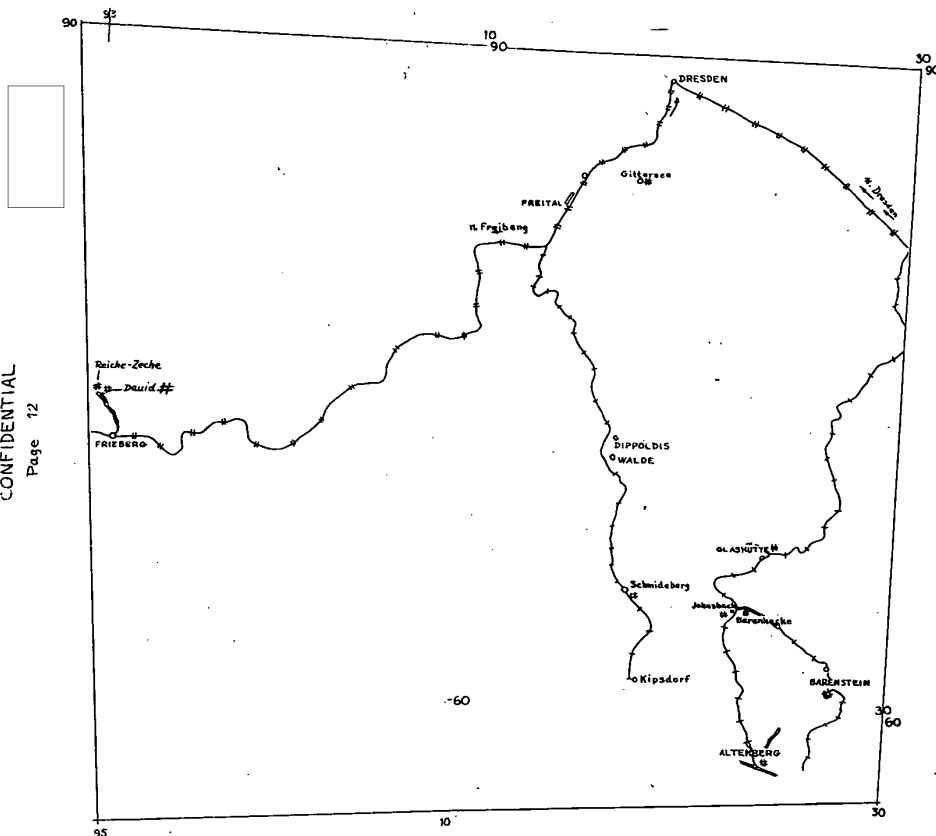


OVERLAY OF GSGS 4416 (A.M.S. M461) SHEET S-7, ZWICKAU ORE MINES  
OF WISMUT A.G. (WEST-ERZGEBIRGE)

CONFIDENTIAL

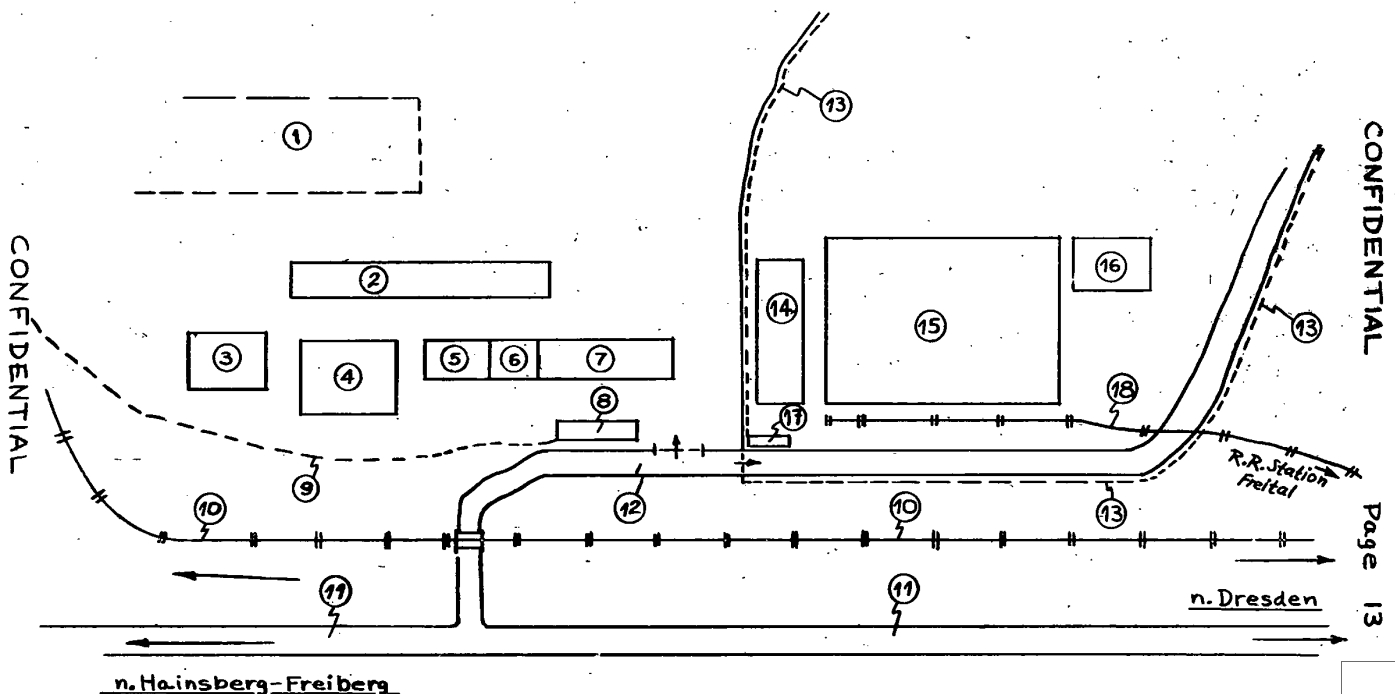
50X1

CONFIDENTIAL  
Page 12



OVERLAY OF GSGS 4416 (A.M.S. M.641) DRESDEN, SHEET R-8 # ORE  
MINE OF WISMUT A.G. (OST-ERZGEBIRGE & FREIBERG)

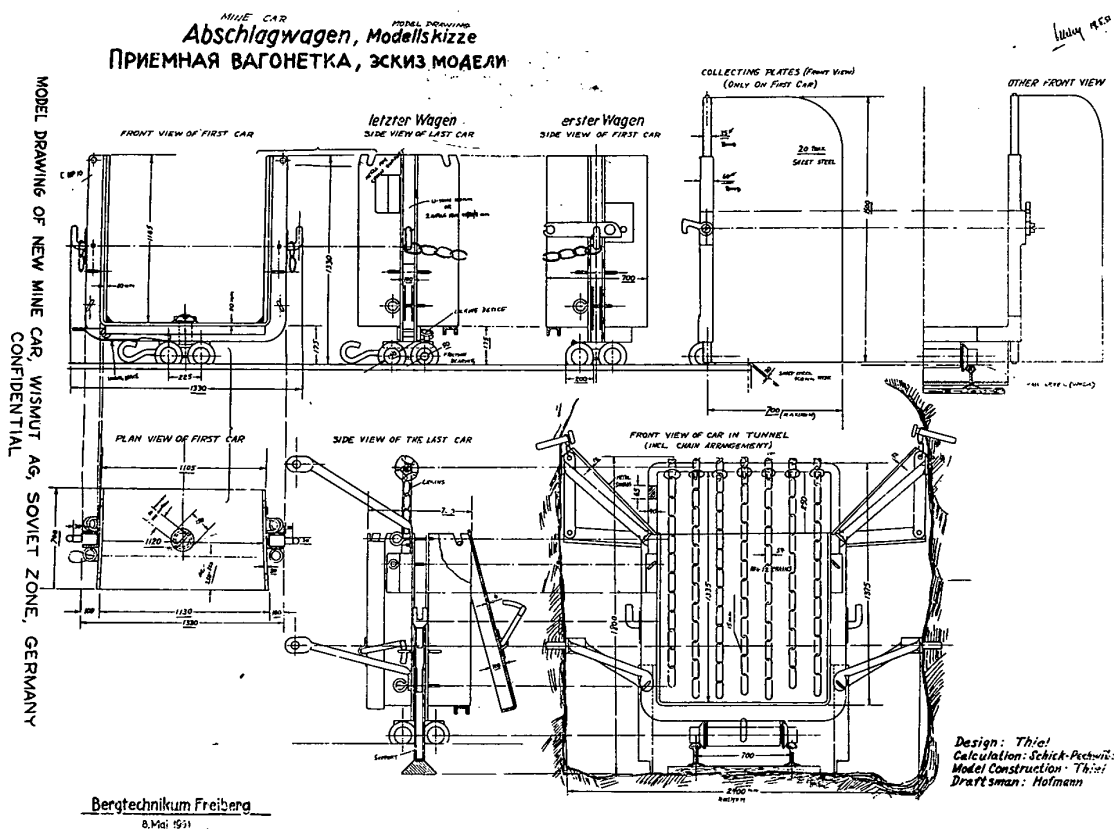
CONFIDENTIAL



CONFIDENTIAL  
Page 13

SITE LAYOUT, WISMUT AG, ORE DRESSING PLANT IN FREITAL, SOVIET ZONE OF GERMANY  
( SKETCH)

50X1-HUM



CONFIDENTIAL  
Page 14

50X1